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Letter to the Editor

Subclinical deterioration of systolic right ventricular function parameters in adolescents with mild cystic fibrosis

To the Editor,

We read with interest the article "Right ventricular dysfunction in adolescents with mild cystic fibrosis" from Baño-Rodrigo et al. [1]. In our opinion this is a very interesting manuscript describing subclinical right ventricle (RV) dysfunction in adolescent patients who suffer from mild cystic fibrosis (CF). The authors clearly state that there is a current need for a detailed evaluation of the RV function parameters, e.g. the tricuspid annular plane systolic excursion (TAPSE) and the tricuspid annular peak systolic velocity (S′) in the CF population [1]. They found that TAPSE and S′ were significantly lower in the adolescent patient group with mild CF than in the control group. For the convenience of the audience of the Journal of Cystic Fibrosis and especially for centers performing detailed echocardiographic investigations, we want to add that recently our group has found a very similar behavior of S′ and TAPSE values in our CF patient cohort [unpublished data] and decreased S′ and TAPSE values in adolescent patients with congenital heart diseases that affect the RV [2,3]. In our opinion it would be very interesting to investigate this adolescent CF patient group [1] in longitudinal follow-up investigations for the point of time at which the decreased TAPSE and S′ values will fall below the −2 SD of normal age-matched values, as the systolic RV function may progressively deteriorate over time, and also if these values fall below the −2 SD they will probably correlate with clinical worsening and/or more severe stage of the CF. Similar findings of abnormal RV TAPSE and S′ values have also recently been reported in other chronic diseases such as rheumatoid arthritis which raises the question of the effect of chronic illness and possible inflammation on the RV regardless of the underlying disease state.

We want to thank the authors for addressing the need for careful and systematic evaluation of the RV in the adolescent population with mild CF. In our opinion the RV function should be carefully investigated in all patients with CF independent of the severity of the disease.

References

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